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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,366	03/01/2005	Stanley E. Wojcicchowski	60152-1074	9401

27305 7590 12/28/2006

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EXAMINER	
KOEHLER, CHRISTOPHER M	
ART UNIT	PAPER NUMBER
3726	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/501,366	WOJCIECHOWSKI ET AL.	
	Examiner	Art Unit	
	Christopher M. Koehler	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-7 and 9-12* is/are pending in the application.

4a) Of the above claim(s) *9-12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller (US Patent No. 5,882,159).

Claim 1:

Muller teaches a method of forming a sealed female fastener and panel assembly, wherein the female fastener includes an annular pilot portion (32) having an annular end face (132, figure 2), a bore extending through said pilot portion through said end face, an annular flange portion (42) having an annular end face (142) parallel to said end face of said pilot portion, and an annular groove (118) in said flange portion having a bottom wall and relatively inclined side walls including an outer side wall and an inner side wall inclined radially outwardly from adjacent said bottom wall wherein the method comprises, driving an annular lip (48) of a die member (12) against a panel (16) engaging said annular end face of the pilot portion, said annular lip having an inner diameter less than an outer diameter of said of said annular end face of said pilot portion (the inner diameter includes portion 56) and an outer diameter less than an inner diameter of said outer side wall of said annular groove, thereby piercing a slug from said panel having a diameter less than the outer diameter of the annular end face of the pilot portion and forming an opening through said panel (figure 1; col. 6, line 66-col.7, line 28), continuing to drive the annular lip of the die member against a panel portion

surrounding the opening in the panel and against an outer periphery of the annular end face of the pilot portion thereby shaving an annular outer portion (58) of the pilot portion against an inner portion (60) of the panel portion (see left side of figure 1), continuing to drive the annular lip of the die member against the panel portion and the annular outer portion of the pilot portion and deforming the pilot portion against the bottom wall of the annular groove thereby deforming the panel portion radially inwardly and outwardly so as to form a portion on the pilot portion extending into the panel portion thereby entrapping the panel portion in the annular groove and sealing the female fastener on the panel (figure 1).

Claim 2:

Muller teaches that the outer side wall of the annular groove is inclined radially inwardly and the panel portion is integral with a remainder of the panel, the method further including deforming the panel portion radially outwardly beneath the inclined outer side wall of the annular groove (figure 1).

Claim 3:

Muller teaches that the outer side wall of the annular groove is arcuately inclined radially outwardly and the panel is deformed around the arcuately inclined surface of the outer side wall of the annular groove (see figure 3, proximate line 224).

Claim 5:

Muller teaches a method of forming a sealed female fastener and panel assembly, wherein the female fastener includes a generally cylindrical pilot portion (32) having an annular planar end face (132, figure 2), a bore extending through said pilot

portion through said annular planar end face, an annular flange portion (42) surrounding said pilot portion having an annular end face (142) parallel to said end face of said pilot portion, and an annular groove (118) in said flange portion having a bottom wall and relatively inclined side walls including an outer side wall inclined inwardly from said bottom wall toward said pilot portion and an inner side wall inclined radially outwardly from adjacent said bottom wall toward said flange portion, wherein the method comprises, driving an annular lip (48) of a die member (12) through an opening in a panel (16) supported on the annular end face of the flange portion, said annular lip having a generally planar annular end face, a generally cylindrical inner surface having an inner diameter less than an outer diameter of said of said annular end face of said pilot portion (the inner diameter includes portion 56) and an outer diameter less than an inner diameter of said outer side wall of said annular groove (figure 1; col. 6, line 66-col.7, line 28), continuing to drive the annular lip of the die member against the annular end face of the pilot portion and an annular panel portion surrounding the opening in the panel thereby shaving an annular outer portion (58) of the pilot portion against an inner portion (60) of the panel portion (see left side of figure 1), continuing to drive the annular lip of the die member against the annular outer portion of the pilot portion and the panel portion against the bottom wall of the annular groove thereby deforming the panel portion radially inwardly and outwardly so as to from a portion on the pilot portion extending into the panel portion thereby entrapping the panel portion in the annular groove and sealing the female fastener on the panel (figure 1).

Claim 6:

Muller teaches that the outer side wall of the annular groove is arcuately inclined toward the pilot portion and the panel is deformed around the arcuately inclined surface of the outer side wall of the annular groove (see figure 3, proximate line 224).

Claim 7:

Muller teaches that the method includes deforming the panel portion radially outwardly beneath the inclined outer side wall of the annular groove (figure 1).

Response to Arguments

3. Applicant's arguments filed 10/11/2006 have been fully considered but they are not persuasive. Applicant argues that Muller does not teach that the pilot portion extends into the panel portion. Muller, however, shows in figures 1 and 3 the deformation of the pilot portion into the panel portion (left side) as well as the non-deformed pilot portion in it relation to the deformed panel portion (right side). In comparison of the deformed/non-deformed pilot portion depictions it is evident that the deformed pilot portion extends into the space occupied by the deformed panel portion with the non-deformed pilot portion. It is therefore interpreted that the pilot portion is deformed such that it extends into the panel portion.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Koehler whose telephone number is (571) 272-3560. The examiner can normally be reached on Mon.-Fri. 7:30A-4:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMK

DAVID P. BRYANT
SUPERVISORY PATENT EXAMINER
12/20/06